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ACCORDING to the First Law of Thermodynamics, nothing in the Universe (i.e., matter or energy) can pop into existence from nothing (see Miller, 2013). **All** of the scientific evidence points to that conclusion. So, the Universe could not have popped into existence before the alleged "big bang" (an event which we do not endorse). Therefore, God must have created the Universe.

One of the popular rebuttals by the atheistic community is that quantum mechanics could have created the Universe. In 1905, Albert Einstein proposed the idea of mass-energy equivalence, resulting in the famous equation, $E = mc^2$ (1905). We now know that matter can be converted to energy, and vice versa. However, energy and mass are conserved, in keeping with the First Law. In the words of the famous evolutionary astronomer, Robert Jastrow, "[T]he principle of the conservation of matter and energy...states that matter and energy can be neither created nor destroyed. Matter can be converted into energy, and vice versa, but the total amount of all matter and energy in the Universe must remain unchanged forever" (1977, p. 32). The idea of matter-energy conversion led one physicist to postulate, in essence, that the cosmic egg that exploded billions of years ago in the alleged "big bang"—commencing the "creation" of the Universe—could have come into existence as an energy-to-matter conversion.

In 1973, physicist Edward Tryon of the Hunter College of the City University of New York published a paper in the British science journal *Nature* titled, "Is the Universe a Vacuum Fluctuation?" He proposed the idea that the Universe could be a large scale vacuum energy fluctuation. He said, "In answer to the question of **why** it happened, I offer the modest proposal that our universe is simply one of those things which happen from time to time" (246:397, emp. added). Does it really? Cosmologist and theoretical physicist Alexander Vilenkin, Director of the Institute of Cosmology at Tufts University, said:

> Now, what Tryon was suggesting was that our entire universe, with its vast amount of matter, was a huge quantum fluctuation, which somehow failed to disappear for more than 10 billion years. Everybody thought that was a very funny joke. But Tryon was not joking. He was devastated by the reaction of his colleagues... (2006, p. 184).

Though he was originally scoffed at, Tryon's theory has gained traction among many prominent evolutionary scientists. After all, if true, according to Vilenkin, "such a creation event would not require a cause" for the Universe (pp. 184-185).

SPECULATION VS. OBSERVATION

THE fact is, the idea that such an event could happen is pure speculation and conjecture. No such phenomenon—the conversion from energy to matter of an entire Universe—has ever been remotely observed. It is a desperate attempt to hold to naturalistic presuppositions, in spite of the evidence, when a supernatural option that is in keeping with the evidence is staring us in the face. Evolutionary physicist Victor Stenger said,

> [T]he universe is probably the result of a random quantum fluctuation in a spaceless, timeless void.... So what had to happen to start the universe was the formation of an empty bubble of highly curved space-time. How did this bubble form? What *caused* it? Not everything requires a cause. It could have just happened spontaneously as one of the many linear combinations of universes that has the quantum numbers of the void.... **Much is still in the speculative stage,** and I must admit that there are yet **no empirical or observational tests that can be used to test the idea of an accidental origin** (1987, 7[3]:26-30, italics in orig., emp. added.).

No evidence. No scientific observation. Just speculation.

Writing in the *Skeptical Inquirer* in 1994, Ralph Estling voiced strong disapproval of the idea that the Universe could create itself out of nothing. He wrote:

> I do not think that what these cosmologists, these quantum theorists, these universe-makers, are doing is **science**. I can't help feeling that universes are **notoriously disinclined** to spring into being, ready-made, out of nothing, even if Edward Tryon (ah, a name at last!) has written that "our universe is simply one of those things which happen from time to time...." **Perhaps, although we have the word of many famous scientists for it, our universe is not simply one of those things that happen**

> **from time to time** (18[4]:430, parenthetical item in orig., emp. added).

Estling's comments initiated a wave of controversy and letters to the *Skeptical Inquirer*, eliciting a response by Estling to his critics. Among other observations, he said, "**All things begin with speculation, science not excluded**. But if no **empirical evidence** is eventually forthcoming, or can be forthcoming, all speculation is barren.... **There is no evidence**, so far, that the entire universe, observable and unobservable, emerged from a state of absolute Nothingness" (1995, 19[1]:69-70, emp. added). Therefore, by naturalists' own definition of science, such an idea is **unscientific**. There is no evidence that could prove such a thing. The creationist platform is in keeping with observational science and has positive evidence of a divine Being (e.g., the presence of intelligent design in nature, the existence of objective morality, the existence of a Universe which demands a cause, and the existence of a Book that contains supernatural characteristics). However, unlike the creationist platform, those who believe in Tryon's theory are holding to a blind faith.

FROM WHENCE CAME ENERGY?

SECOND, even if such a thing were possible—that energy could be converted to matter in the way that Tryon has suggested—one must ask, "Where did the energy come from?" Alan Guth, professor of physics at M.I.T., wrote in response to Tryon: "In this context, a proposal that the universe was created from empty space is no more fundamental than a proposal that the universe was spawned by a piece of rubber. It might be true, but one would still want to ask **where the piece of rubber came from**" (1997, p. 273, emp. added).

Energy could not have popped into existence without violating the First Law of Thermodynamics. So in reality, when scientists argue that quantum mechanics creates something from nothing, they do not really mean "nothing." The problem of how everything got here is still present. The matter generated in quantum theory is from a vacuum **that is not void**. Philip Yam of *Scientific American* wrote, "Energy in the vacuum, though, is very much real. According to modern physics, **a vacuum isn't a pocket of nothingness**. It churns with unseen activity even at absolute zero, the temperature defined as the point at which all molecular motion ceases" (1997, p. 82, emp. added). Prominent humanist mathematician and science writer, Martin Gardner, wrote: "It is fashionable now to conjecture that the big bang was caused by a random quantum fluctuation in a vacuum devoid of space and time. But of course such a vacuum is **a far cry from nothing**" (2000, p. 303, emp. added). Amanda Gefter, writing in *New Scientist*, said, "Quantum mechanics tells us that **the vacuum of space is not empty**; instead, it crackles with energy" (2010, p. 29, emp. added). Physicist Richard Morris wrote:

> In modern physics, **there is no such thing as "nothing."** Even in a perfect vacuum, pairs of virtual particles are constantly being created [i.e., by briefly "borrowing" energy already in existence—JM] and destroyed. The existence of these particles is no mathematical fiction. Though they cannot be directly observed, the effects they create are quite real. The assumption that they exist leads to predictions that have been confirmed by experiment to a high degree of accuracy (Morris, 1990, p. 25, emp. added).

Astrophysicist Rocky Kolb, chairman of the Department of Astronomy and Astrophysics at the University of Chicago, wrote: "[A] region of seemingly empty space is **not really empty**, but is a seething froth in which every sort of fundamental particle pops in and out of empty space before annihilating with its antiparticle and disappearing" (1998, 26[2]:43, emp. added). Estling continued his extensive observations in response to his critics (mentioned above), saying:

> Quantum cosmologists insist both on this absolute Nothingness and on endowing it with various qualities and characteristics: this particular Nothingness possesses virtual quanta seething in a false vacuum. **Quanta, virtual or actual, false or true, are not Nothing, they are definitely**

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Something, although we may argue over what exactly. For one thing, quanta are entities **having energy**, a vacuum has energy and moreover, extension, i.e., it is something into which other things, such as universes, can be put, i.e., **we cannot have our absolute Nothingness and eat it too**. If we have quanta and a vacuum as given, we in fact have a pre-existent state of existence that either pre-existed timelessly or brought itself into existence from absolute Nothingness (no quanta, no vacuum, no pre-existing initial conditions) at some precise moment in time; it creates this time, along with the space, matter, and energy, which we call the universe.... I've had correspondence with Paul Davies [eminent atheistic theoretical physicist, cosmologist, and astrobiologist of Arizona State University, who advocates the supposition that the Universe created itself from nothing—JM] on cosmological theory, in the course of which, I asked him what he meant by "Nothing." He wrote back that he had asked Alexander Vilenkin what he meant by it and that Vilenkin had replied, "By Nothing I mean Nothing," which seemed pretty straightforward at the time, but **these quantum cosmologists go on from there to tell us what their particular breed of Nothing consists of**. I pointed this out to Davies, who replied that these things are very complicated. I'm willing to admit the truth of that statement, **but I think it does not solve the problem** (1995, 19[1]:69-70, emp. added).

No wonder Jonathan Sarfati said:

> Some physicists assert that quantum mechanics...can produce something from nothing.... But this is a gross misapplication of quantum mechanics. **Quantum mechanics never produces something out of nothing**.... Theories that the Universe is a quantum fluctuation must presuppose that **there was something to fluctuate**—their "quantum vacuum" is a lot of matter-antimatter potential—not "nothing" (1998, 12[1]:21, emp. added).

Vilenkin, while explaining the problems inherent in Tryon's work, said:

> A more fundamental problem is that Tryon's scenario does not really explain the origin of the universe. A quantum fluctuation of the vacuum assumes that there was a vacuum of some pre-existing space. And we now know that **"vacuum" is very different from "nothing."** Vacuum, or empty space, **has energy and tension**, it can bend and warp, so it is unquestionably *something* (2006, p. 185, ital. in orig., emp. added).

He went on to propose that quantum tunneling could be the answer to the creation of the Universe out of nothing. However, quantum tunneling starts with **something** and ends with **something** as well. Particles that can jump or tunnel through barriers still must initially exist to do so. Bottom line: according to renowned atheist, theoretical physicist, and cosmologist of Cambridge University, Stephen Hawking, in order to create a Universe, "you need just three ingredients": matter, energy, and space ("Curiosity...," 2011). These three ingredients must exist in order to create a Universe, according to Hawking. **So, the problem remains. Where did the ingredients for the Universe soup come from? There must be an ultimate Cause of the Universe.**

NON-EXISTENT QUANTUM LAW-MAKER?

THIRD, even if one were to irrationally accept the premise that quantum theory allows for the possibility that Universes could pop into existence, in the words of astrophysicist Marcus Chown:

> If the universe owes its origins to quantum theory, then quantum theory must have existed before the universe. So the next question is surely: **where did the laws of quantum theory come from**? "We do not know," admits Vilenkin. "I consider that an entirely different question." When it comes to the beginning of the universe, in many ways we're still at the beginning (2012, p. 35, emp. added).

Martin Gardner said,

> Imagine that physicists finally discover all the basic waves and their particles, and all the basic laws, and unite everything in one equation. We can then ask, "Why that equation?" It is fashionable now to conjecture that the big bang was caused by a random quantum fluctuation in a vacuum devoid of space and time. But of course such a vacuum is a far cry from nothing. **There had to be quantum laws to fluctuate. And why are there quantum laws?... There is no escape from the super-ultimate questions: Why is there something rather than nothing, and why is the something structured the way it is?** (2000, p. 303, emp. added).

In "Curiosity: Did God Create the Universe?" Stephen Hawking boldly claimed that everything in the Universe can be accounted for through atheistic evolution without the need of God. This is untrue, as we have discussed elsewhere (e.g., Miller, 2011), but it seems that Hawking does not even believe that assertion himself. He asked the question, "**Did God create the quantum laws** that allowed the Big Bang to occur? In a nutshell, did we need a god to set it all up so that the Big Bang could bang?" ("Curiosity...," emp. added). He then proceeded to offer no answer to the question. In his critique of Hawking, Paul Davies highlighted this very fact, saying, "You need to know where those laws come from. That's where the mystery lies—the laws" ("The Creation Question...," 2011). Quantum mechanics, with its governing laws, simply do not leave room for the spontaneous generation of Universes.

Responses

But what if quantum theory could allow for spontaneous generation at the

Does Genesis 4 Indicate that God Specifically Created Others Besides Adam and Eve?

Eric Lyons, M.Min.

If Adam and Eve were the only human beings that God miraculously created, where did all of the people come from who were of great concern to Cain? After God sentenced the murderous Cain to be "a fugitive and a vagabond" on the Earth (Genesis 4:12), recall that Cain said to the Lord, "My punishment is greater than I can bear" (4:13). Cain then said: "Surely You have driven me out this day from the face of the ground; I shall be hidden from Your face; I shall be a fugitive and a vagabond on the earth, and it will happen that **anyone** who finds me will kill me" (4:14, emp. added). God then responded to Cain, saying, "Therefore, **whoever** kills Cain, vengeance shall be taken on him seven-fold." So, "the Lord set a mark on Cain, lest **anyone** finding him should kill him" (4:15, emp. added). Do the references to "anyone" and "whoever" in these verses suggest that God specially created others besides Adam and Eve?

Before answering these questions, one must keep in mind that Genesis chapters 1-11 cover approximately the first 2,000-plus years of human history (Butt, 2002; cf. Lyons, 2002). The following 1,178 chapters of the Bible tell us about the next 2,000 years. Although the first 11 chapters of Genesis are undeniably literal, historical language (cf. Thompson, 2001), God chose to reveal to man only a few important facts about the first 2,000-plus years of man's existence—and most of this revelation is about Creation, the Fall, and the Flood. What's more, Genesis chapters 4-5 likely cover a period of more than 1,400 years. Thus, a lot of time can pass between events without the text specifically expressing exactly how many decades or centuries elapsed.

How much time elapsed in Genesis 4:2? Immediately following the announcement of Cain and Abel's births (4:1-2), the text says, "Now Abel was a keeper of sheep, but Cain was a tiller of the ground" (4:2). Most likely, at least 20 years had passed by this time, and it could be that several more decades had expired before Cain and Abel finally settled on their respective vocations. (How many people today do not settle on a profession until they are 35 or 40 years old?)

How much time transpired when the Bible says, "**And in the process of time it came to pass** that Cain brought an offering of the fruit of the ground to the Lord" (4:3, emp. added)? How long was Cain angry with Abel before God spoke to Cain about his anger (4:6)? How long was it before Cain spoke with Abel (4:8)? (Have you ever known people, even family members, to hold-in feelings of resentment for years or decades?) Genesis 4:8 says, "**It came to pass** when they were in the field, that Cain rose up against Abel his brother and killed him" (emp. added). Again, we cannot know exactly how much time transpired between the conversation that Cain had with Abel and the day that he actually murdered Abel (4:8).

The fact is, Cain could have been **100 years old** or more by the time he killed his brother. [Keep in mind that since the patriarchs often lived to be several hundred years old (e.g., Adam died at the age of 930), being 100 in that day, was somewhat comparable to being 20 today.] What's more, Adam and Eve may have had 50 children or more by the time Cain killed Abel (cf. Genesis 5:4). They may have had 300 grandchildren by then. There could have been three or four generations of Adam's descendants on Earth by the time God sentenced Cain to be "a fugitive and a vagabond."

How many children, and possibly grandchildren, did Adam and Eve have when God

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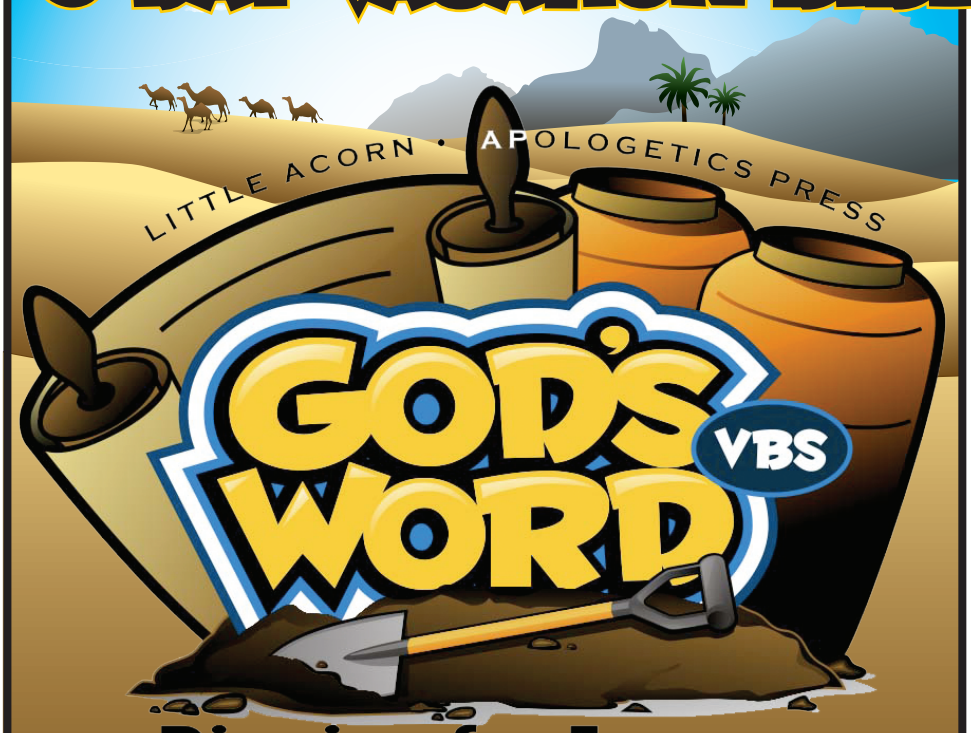

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said, "**Whoever** kills Cain, vengeance shall be taken on him sevenfold"? How many people had descended from Adam by the time God "set a mark on Cain, lest **anyone** finding him should kill him"? Who were the "whoever" and "anyone" that both God and Cain mentioned? They were the dozens, hundreds, or possibly thousands of people on Earth by that time—all of whom were descendants of Adam, "the first man" (1 Corinthians 15:45) and Eve, "the mother of all living" (Genesis 3:20). In no way does reason or inspired revelation forbid a literal interpretation of Genesis; on the contrary, it demands such.

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Founding Father Elias Boudinot on Islam

American views of Islam going back to the origins of America have been generally consistent. With a Christian worldview intact at the beginning, Americans have naturally recognized Islam's inherent hostility toward Christianity and its fundamental threat to the American way of life. For example, Elias Boudinot was a premiere Founding Father with a long and distinguished career. He served as a member of the Continental Congress, where he served as its president (1782-1783); he signed the Treaty of Peace with Great Britain; he was a member of the U.S. House where he helped frame the Bill of Rights; he served as the Director of Mint under presidents Washington and Adams; etc. In his masterful refutation of Thomas Paine's *Age of Reason*, Boudinot labeled Muhammad an "impostor," and insightfully observed that

> Mahomet aimed to establish his **pretensions to divine authority**, by the power of the sword and the terrors of his government; while he carefully avoided any attempts at miracles in the presence of his followers, and all pretences to foretell things to come. **His acknowledging the divine mission of Moses and Christ confirms their authority** as far as his influence will go **while their doctrines entirely destroy all his pretensions to the like authority**.... And now, where is the comparison between the supposed prophet of Mecca, and the Son of God; or with what propriety ought they to be named together?...The difference between these characters is so great, that the facts need not be further applied (1801, pp. 36-39, emp. added).

Elias Boudinot

This premiere Founder merely expressed the sentiments of the bulk of the Founders as well as the rank and file of American citizens. The political correctness that now characterizes western civilization has desensitized citizens and left the country vulnerable to the sinister infiltration of an ideology that is antithetical to the principles of the American Republic.

Dave Miller

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quantum level? What if the First Law of Thermodynamics does not apply at the unobservable molecular world of quantum mechanics but only to the macroscopic world that we can actually see? Even if that were the case (and there is no conclusive evidence to support the contention that there are **any exceptions** whatsoever to the First Law of Thermodynamics—see Miller, 2010a), according to the Big Bang model, the **quantum level** cosmic egg eventually became **macroscopic** through expansion or inflation. Such an event would have been the equivalent of a breach of the First Law, even under such a speculative definition.

But isn't it true that "one usually assumes that the current laws of physics did not apply" at the beginning (Linde, 1994)? Assumptions must be reasonable. What evidence could be used to back such a grandiose assumption? And again, who would have written the laws at the moment they became viable? And further, if the laws of physics broke down at the beginning, one cannot use quantum law to bring about matter, which is precisely what the quantum fluctuation theory attempts to do. [NOTE: See Miller, 2010b for more on this contention.]

CONCLUSION

CAN quantum mechanics create Universes from **nothing**? No. Quantum particle generation requires pre-existing energy—a far cry from nothing. Could quantum mechanics spontaneously create Universes from pre-existing (i.e., created by God) energy? There is no scientific evidence to support such a proposition. So it is speculation and conjecture—wishful thinking on par with postulating that aliens brought life to Earth (which some irrationally believe). Tiny quantum particles fluctuating—bouncing around—is one thing. The creation of the entire Universe through a quantum fluctuation? That's another.

One who wishes to avoid acknowledging the existence of God should be expected to do almost anything to deny it. Reason will be thrown aside, and acceptance of far-fetched theories—theories that are so speculative that they belong in the fiction section of the library along with the *The Wizard of Oz*—will be latched onto as fact. The Bible gives the rationale for this irrational behavior by explaining that such a person has "itching ears" (2 Timothy 4:3). Such a person will "heap up...teachers" who will tell him what he wants to hear, who sound smart, and therefore, will make him feel good about the blatantly irrational position that he holds (vs. 3). He will turn his "ears away from the truth, and be turned aside to fables" (vs. 4). Thus, "professing themselves to be wise, they became fools" (Romans 1:22). The quantum fluctuation idea is simply another example of this same mentality, and the admonition to Christians is the same as it was in the first century: "But you be watchful in all things" (vs. 5). "Guard what was committed to your trust, avoiding the profane and idle babblings and contradictions of what is falsely called knowledge" (1 Timothy 6:20).

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Zero Energy Balance and Universes Popping Into Existence

Jeff Miller, Ph.D.

PERHAPS it seems like common sense to you that universes do not create themselves—popping into existence all over the place, but many naturalistic scientists are latching on to such bizarre ideas due to their lack of a naturalistic explanation for the origin of the Universe. Famous atheist, theoretical physicist, and cosmologist of Cambridge University, Stephen Hawking, said, "Bodies such as stars or black holes cannot just appear out of nothing. But **a whole universe can**.... Because there is a law like gravity, **the universe can and will create itself from nothing**" (2010, p. 180, emp. added). Is there any empirical evidence suggesting that universes can pop into existence? Absolutely not. Is there evidence that **anything** can pop into existence from nothing? Nope. We have a law of science that prohibits it—the First Law of Thermodynamics (cf. Miller, 2013). Does the idea that something could pop into existence from nothing remind you of a magician's trick? Probably. But to many in the scientific community today, naturalism **must** be true. They **will not** consider God. He is not allowed in the discussion. "Creation is unacceptable, but witchcraft? Now **that**...we'll consider."

THE PROBLEM FOR THE NATURALIST

ACCORDING to the First Law of Thermodynamics, "energy can be neither created nor destroyed; it can only change forms" (Cengel and Boles, 2002, p. 166). This poses a problem for the atheist, since the energy and matter of the Universe had to come from somewhere. Hawking said:

> The idea of inflation could also explain why there is so much matter in the universe. There are something like ten million million million million million million million million million million million million million million (1 with eighty zeros after it) particles in the region of the universe that we can observe. Where did they all come from? The answer is that, in quantum theory, particles can be created out of energy in the form of particle/anti-particle pairs. But that just raises the question of **where the energy came from** (1988, p. 129, emp. added, parenthetical item in orig.).

Evolutionary physicist Victor Stenger, in his book, *God: The Failed Hypothesis*, said:

> [W]here does the energy come from? The law of conservation of energy, also known as the *first law of thermodynamics*, requires that energy come from somewhere. In principle, the **creation hypothesis could be confirmed** by the direct observation or theoretical requirement that conservation of energy was violated 13.7 billion years ago at the start of the big bang (2007, p. 116, ital. in orig., emp. added).

THE NATURALIST'S RESPONSE

HAWKING believes he has an answer to this problem for the naturalist—one that is in keeping with the First Law:

> The answer is that the total energy of the universe is exactly zero. The matter in the universe is made out of positive energy. However, the matter is all attracting itself by gravity.... Thus, in a sense, the gravitational field has negative energy. In the case of a universe that is approximately uniform in space, one can show that this negative gravitational energy exactly cancels the positive energy represented by the matter. So the total energy of the universe is zero (1988, p. 129).

Stenger concurs:

> The first law allows energy to convert from one type to another as long as the total for a closed system remains fixed. Remarkably, the total energy of the universe appears to be zero (2007, p. 116).

So, in essence, these physicists assert that there would have been zero energy in the Universe before the alleged big bang (a theory which we do not support, cf. Thompson, et al., 2003), and then there would have been zero energy in the Universe after the big bang, since "matter energy" can be considered to be positive and "gravitational energy" can be considered to be negative. According to Hawking and Stenger, these two amounts cancel each other out, leaving zero energy in the Universe—zero energy before the bang, and zero energy after. Sound reasonable to you?

THE EVIDENCE FROM SCIENCE AND SENSE

FIRST of all, notice that Hawking boldly proclaims two significant assumptions that cannot even remotely be verified. (1) The Universe must be "approximately uniform in space"; and (2) The "negative gravitational energy **exactly cancels** the positive energy represented by the matter. So the total energy of the universe is zero" (1988, p. 129, emp. added). How, pray tell, could Hawking know such things about this vast and infinitely complex Universe without being omniscient? Not only can he not know such things, but he cannot even **claim** such things with the meager evidence about the entirety of the Universe he has at his disposal. It is quite a leap to hold to such unverified assumptions. It is a blind faith in a proposition that cannot be established scientifically. The rational man's beliefs are based on the evidence—not baseless speculation.

Second, notice that he says, "**in a sense**, the gravitational field has negative energy" (1988, p. 129, emp. added). The words, "in a sense," are significant, because they highlight the fact that gravitational energy is not really inherently "negative." We call it "negative" from a certain viewpoint when we have such a thing as a directional axis to compare its effect with; but, in actuality, gravitational energy is simply energy—regardless of its sign. Hawking, himself, used the term "energy" to describe gravity. Whether or not it is considered "negative" is not the question. The question in light of the First Law is, where did it come from?

Third, this line of reasoning implies that things could and should be popping into existence all around us all the time, as long as those items have enough negative gravitational energy to offset them. Particles, rocks, and infinitely complex Universes should be popping into existence, since such occurrences—according to these physicists—would not violate a natural law. But wait. That does not happen. It has never been observed to occur even once. And our common sense verifies that it will not happen. Science does not support such a hypothesis. The hypothesis is **unscientific**.

Fourth, consider: is there energy in the Universe today that would not have been in existence before the supposed big bang? Yes. If I were to ask Hawking and Stenger if energy exists in the Universe today, what do you suppose they would say? To ask is to answer. But the First Law prohibits the creation of energy. So, the question is not whether the energy balance before and after the big bang is still zero. The important question in light of the First Law is whether or not there is energy in the Universe today that was not there before the big bang. The answer would have to be, "yes." In fact, there are, by Hawking's own admission, "negative" **and** "positive" energies in existence. According to the First Law of Thermodynamics, they could not have created themselves. Therefore, God must exist.

In essence, Hawking and those who hold to his position are playing word games with "zero." It is like the man who holds out an empty fist and asks a child, "What am I holding in my hand?" The child responds, "Nothing." The man continues, "What is stronger than God?" The child responds, "Nothing." The man then concludes, "So, what I'm holding in my hand is stronger than God." In logic, this is known as a "fallacy of equivocation," which the *Collins English Dictionary* defines as "a fallacy based on the use of the same term in different senses, esp. as the middle term of a syllogism, as **the badger lives in the bank, and the bank is in the High Street, so the badger lives in the High Street**" (2003, ital. in orig.; cf. Baum, 1975, pp. 477-478). While there is a Universal energy balance of zero in Hawking's model, it does not mean that there is actually zero energy in the Universe. On the contrary, the exorbitant amount of energy in the Universe calls for an explanation that can only be given by the Creation model.

CONCLUSION

In the words of Stenger:

> Conservation of energy [i.e., the First Law of Thermodynamics—JM] and other basic laws **hold true in the most distant observed galaxy** and in the cosmic microwave background, implying that these laws have been valid for over thirteen billion years [NOTE: we do not hold to this deep time supposition—JM]. Surely any observation of their violation during the puny human life span would be reasonably termed a **miracle**.... In principle, **the creation hypothesis could be confirmed** by the direct observation or theoretical requirement that conservation of energy was violated 13.7 billion years ago at the start of the big bang (pp. 115-116, emp. added).

It is truly ironic that Stenger, himself, while attempting to dismiss the necessity of the supernatural in explaining the origin of the Universe, "confirmed" the existence of God through the "theoretical requirement that conservation of energy was violated" in the beginning of time. It is sad that Stenger's admission on this point illustrates that, prior to Hawking's development of this argument, Stenger recognized the need for the supernatural in explaining the origin of energy, since no "scientific" argument was available. Why, sir, did you not accept God before that point? And why, sir, do you not accept Him now, since He alone can account for the existence of the awesome Universe in which we reside?

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NOTE FROM The Editor

Another Web Site Record & New VBS

We have two exciting announcements to make with this issue of *R&R*. First, as we normally do this time of year, we collect and analyze the data pertaining to the impact of the A.P. Web site during the previous year. For the past several years, we have been thrilled to see the interest from around the world continue to build, resulting in new records each year. From 2010 to 2011, visitors to our site nearly doubled, surpassing eight million page hits. Last year, 2012, was another "banner year." We received over 9.5 million page hits! (9,519,901 to be exact). Why are we so pleased about such records? Only one reason: more and more people are being touched by the spiritual truths that we seek to disseminate throughout the world. That's why we're here—to produce materials that defend the Christian Faith, pointing people to the one true God and the one true religion. We recognize that our efforts are feeble, and that it is God Who can use such avenues of outreach to save lost souls. We give Him the credit and glory. (For more details, see the centerspread in this issue of *R&R*).

Second, be reminded that three years ago, in response to numerous requests from churches and individuals over the years, A.P. released its first VBS curriculum. The topic of the VBS is "God's Creation," and the reception has been phenomenal—with hundreds of churches taking advantage of it. We are now pleased to release our second VBS—in plenty of time for the summer. Working once again in conjunction with our good friends at Little Acorn, this VBS is titled "The Bible is God's Word." The reliability and inspiration of Scripture are covered, including how we know the Bible has been transmitted accurately down through the ages. Young people of all ages will have their confidence in the Bible bolstered. Materials for teens and adults are included. You might want to consider urging your church to use one of our VBS curricula this summer.

Dave Miller

See the Center Spread for More Details